



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,070	12/11/2003	Sherif Eldally	100751.52969US	8470

23911 7590 10/07/2004

CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER
----------

SMITH, JULIE KNECHT

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,070

Applicant(s)

ELDALLY, SHERIF

Examiner

Julie K Smith

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "said engaging gears" in lines 5 and 6. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-18, 20, 21, 23-25, 27 and 29-37 rejected under 35 U.S.C. 102(b) as being anticipated by Winter et al. (4,019,405). Winter et al. discloses a transmission system comprising a primary engaging gear (or sprocket) having elongated teeth (12) comprising a first side having an engaging section and a non-engaging section (both sections equal 360°), and a plurality of engaging gears (or sprockets) (16, 18) for engaging with said engaging section at an angle perpendicular to said primary engaging gear wherein said engaging gears are configured such that at least one of said engaging gears (16) is engaged to said engaging section of said

Art Unit: 3682

primary engaging gear at a particular angular orientation of said primary engaging gear, and at least one of said engaging gears (18) is not engaged to said engaging section at said particular angular orientation of said primary engaging gear. The engaging section comprises a gear ratio changing path and spiral teeth having a longitudinal direction that substantially coincides with a radial direction of the primary engaging gear, said longitudinal direction is skewed from a radial direction of said primary engaging member by a helix angle. The transmission further comprises shafts (14, 19) rotationally engaged with said primary engaging gear and respective engaging gears wherein each of said shafts comprises a narrower diameter section, having a key portion, interposed between two wider diameter sections for retaining the gear on the shaft, wherein said corresponding engaging gear includes an aperture registered with said narrower diameter section, and wherein said corresponding engaging gear is capable of moving along an axial direction of said narrow diameter section. Winter et al. further discloses a second set of engaging gears (17, 18) and secondary shaft (15) rotationally engaged with said shafts (14, 19). The transmission further includes a device to move said engaging gears in a manner that changes a gear ratio between said engaging gears and the primary gear (see fig. 4), said device comprising a motor with a spring (35). Said device further comprising a plurality of rods (29, 30), wherein each rod includes a first portion pivotally coupled to an engaging member by way of a bearing (31, 32) and a second portion pivotally coupled to an adjacent rod (see fig. 4) for ensuring that the engaging members engage said primary engaging member at the same gear ratio position during movement along the gear ratio changing path.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. as applied to claims 1-18, 20, 21, 23-37 above.

Regarding claims 19 and 22, although Winter et al. does not disclose the device being a hydraulic or pneumatic device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a hydraulic or pneumatic device, as it is old and well known in the art to use those types of devices for creating a driving force.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,158,296 to Denance

5,178,028 to Bossler, Jr.

2,033,850 to Roberts, Jr.

GB 2 263 953 to Smith

EP 0 461 534 to Claudeville

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Smith whose telephone number is 703-305-3948. The examiner can normally be reached on Monday-Friday, 8-5:30, (Every other Friday off).

Art Unit: 3682


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OKS

Jks

September 23, 2004

  
WILLIAM C. JOYCE  
PRIMARY EXAMINER